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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/221,542
Filing Date: December 28, 1998
Appellant(s): LABRIE, JACQUES JOSEPH

Michael E. Hudzinski
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed on April 11, 2007 appealing from the Office action mailed on May 26, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,315,709	Alston, Jr. et al.	May 24, 1994

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Alston, Jr. et al. (U. S. Patent No. 5,315,709).

As to claims 1, 7, 13, 19 and 27-28, Alston et al. (hereinafter referred as Alston) disclose a computer system [e.g., the unit 10, Fig. 1A-ID and associated texts] with means, methods and computer program product to perform the functions as claimed by applicant, comprising:

a) a computer [the unit 10, Fig. 1A-1D] having a memory [e.g., the unit 24, Fig. 1A], and a data storage device [e.g., the unit 46, Fig. 1B] coupled thereto that stores data in an information catalog [e.g., the unit 48, Fig. 1B];

b) one or more computer programs, performed by the computer, for, in response to receiving user input , selecting a target object in an information catalog and providing information about a source data from which the target object was derived via a transformation performed on contents of the source data [e.g., the Bachman Analyst TM, the DB2 TM , col. 1, line 60 – col. 2, line 8, col. 7, lines 21 – col. 8, line 46; Fig(s). 1B, 5A-8 and associated texts];

c) a plurality of objects including a target object [e.g., the unit 42, Fig. 2] wherein the target object was derived from one or more transformations of one or more sources data [e.g., 32, Fig. 2; col. 13, Forward/Reverse Transformation section];

d) a transformation lineage system which stores transformation lineage information for the target object, the transformation lineage information associating the target object with the one or more transformations and identifying the one or more data sources [e.g., the Transformation system 10, Fig(s). 1A-2 and associated texts; col. 17, lines 45 – col. 18, line 20];

e) a user interface [e.g., the Bachman 3.10 interface of Fig(s). 5A – 8], for receiving user input for selecting one of the plurality of objects; wherein, the user interface configure to display the transformation lineage information in response to receiving user selected input [e.g., Fig(s). 5A-8 and associated texts].

As to claims 2, 8, 14 and 20-21, Alston further disclosed the target object [e.g., the node 42, Fig. 2] and the information are represented as a node in a tree structure [e.g., the data structure containing a set of nodes that are linked in a hierarchical fashion as shown in Fig. 2, col. 9, lines 45 - col. 10, line 18].

As to claims 3, 9, 15, 22 and 24, Alston further disclosed the system having one or more computer programs including means and logic for providing the transformation information of source to target [e.g., the Bachman Analyst TM, col. 1, line 60 – col. 2, line 3; the unique naming schema at col. 4, lines 12-27].

As to claims 4, 10, 16 and 23, Alston further disclosed the system having means to identify a transformation producing function [e.g. the meta system 22, 24 of the Workstation Manager 20, Fig. 1; col. 8, lines 14-25].

As to claims 5, 11, 17 and 25, Alston further disclosed the system having means for providing lineage information [e.g., the hierarchy order of the linear engineering design space, Fig. 2].

As to claims 6, 12, 18 and 26, Alston further disclosed the system having means for maintaining one or more transformation models for use in providing the lineage information [e.g., the engineering and reverse engineering processing at col. 8, lines 47-63].

(10) Response to Argument

Appellant's piece-meal interpretation and arguments filed on April 11, 2007 have been fully considered but they are not persuasive.

The Applicant's Invention:

A computer-implemented system and method that provides a utility for system users to navigate a plurality of data objects stored in an information catalog, selecting a target object in the information catalog; and providing information about source data from which the target data object was derived via a lineage data transformation.

The main arguments cited by appellant against the 35 U.S.C. 102(b) rejections are summarized as following: "although Alston discloses a graphic user interface and the transformation of objects in a first data model to objects in a second data model, it falls short of receiving input from a user navigating data objects stored in an information catalog selecting a target data object in the information catalog and providing information about source data from which the target data object was derived via a transformation performed on the source to derive the target object."

In response to the above arguments, the examiner directs appellant's attention to the following excerpts and Fig.(s) disclosed by Alston:

> *"The invention is directed to a computer implemented system and apparatus for transforming objects in a first data model (source design objects) to objects in a second data model (target design objects) and synchronizing the two data models. The result of the transformation is that at least one of the target design objects is associated with a corresponding source design object. The system associates a unique identifier with each of the target design objects and source design objects, the unique identifier being associated with each map associated with each design object." (Abstract)*

Here, Alston clearly cited a computer system for transforming source design objects in a first data model to target design objects in a second data model and synchronizing these two data models via maps.

In addition, Alston clearly disclosed his system implements two distinct logical designing spaces (e.g., the Bachman Analyst, and the Bachman DBA for DB2 TM, col. 8, lines 26 – 34). These two distinct logical designing spaces are implemented to include a plurality of Desk Top modeling utilities (e.g., the units: 14A-14I, Fig. 1B), meta data & DML subsystems (e.g., the units: 22, 24, 20, Fig. 1B) and database management interface modules (e.g., the units: 44, 46, 48, Fig. 1B) to facilitate the data objects communication via SQL files (e.g., the unit 16, Fig. 1B). Extracting and storing of data objects form or into a DB2 catalog product via program interface modules (e.g., the units: 44, 48, Fig. 1B). For example, the analyst designer or editor or forms, Forward/Reverse Eng. Advisors, DBA/DB2 Editor, or designer, or forms, etc. (e.g., the units: 14A – 14I, Fig. 1B) that were coupled to a visual display motoring unit and input data entry unit (e.g., the units: 12, 22, Fig. 1B) are deemed to allow the system users

interacts between the operational machine (e.g., the unit 18, Fig. 1B) and mainframe computer [e.g., the unit 26, Fig. 1B] through the use of the Standard Query Language file (e.g., the unit 16, Fig. 1B). Furthermore, the data modeling objects created by the user in the system 10 are generated into SQL file and sent to a capture program [e.g., the unit 44, Fig. 1B] for enabling the module to communicate with the DB2 catalog of DB2 products [e.g., the unit 46, Fig. 1B, col. 7, lines 58 – col. 8, lines 6] and the use of the SQL files is deemed to allow the system users to either retrieve source objects into the two target designing spaces via the Backman Catalog Extract for DB2 module (e.g., the unit 48, Fig. 1B) or stored the designed objects in the DB2 Catalog Module (e.g., the unit 46, Fig. 1B).

Alston further disclosed the followings:

"In one form of the invention, each object in the two design spaces may have an associated system map and a user map, where the system map (containing the unique identifier for the object) is immutable by a user, and the user map is selectively modifiable by a user." (col. 4, lines 36-40)

"Alternatively, in another embodiment of the invention, there may be a composite map related to each pair of associated objects in the two design spaces. In this form, a single unique identifier is associated with the composite map, and a unique relationship is established between each source design object and its corresponding target design object."(col. 4, lines 41-47)

"To achieve synchronization following periods of independent operations on models in each of two design spaces, the objects in the source design space are each transformed to merged objects in accordance with the system of the invention prior to further independent processing. Preferably, each source object is identified as a particular classtype in the design space. In one embodiment of the invention, transformation of the SDO's into merged objects occurs not only over all objects in a design space, but is performed per class, in a preestablished hierarchy of processing order. Thus, all SDO's of one classtype are processed before SDO's of another classtype." (col. 4, lines 48-60)

"In both of these circumstances, it is desirable to transform, or translate, a resultant model in its space to the other model in the other space." (e.g., col. 8, lines 43 – 46)"

"The process of translating or transforming one data model in one design space to another data model in another design space is referred to as "engineering". Engineering may be driven in either direction, i.e., from one design model to another. Once a hierarchy is assigned to each of the respective design spaces, the directionality of engineering may be specified as being either "forward" or "reverse". That is, in a system, if an extended entity model design space is assigned priority over a relational model design space, "forward" will be defined as a processing direction from the extended entity model to the relational model. In that system, processing direction from the relational model to the extended entity model is defined as "reverse". The preferred embodiment described herein has that exemplary hierarchy, although other hierarchies could be used in other embodiments." (col. 8, lines 47-63)

"Maps serve three functions: 1) to enable the user to drive engineering, either forward or reverse; 2) to enable the user to view the relationships between design objects in the different design spaces; and 3) to synchronize the two data models. All design objects in the two data models are related across the designs by maps. The maps include system maps and user maps and are associated with SDO's as source maps, and TDO's as target maps The respective maps generally include data pointing to related objects in the respective design spaces, but may be empty maps (having no such data) or may be null maps (which point to only one object)." (col. 11, lines 24-36)

Thus, as set forth above, in contrary to appellant's arguments Alston's data objects design, modeling & transformation system definitely provides a display device (e.g., the unit 12, Fig. 1B) with Graphic User Interface (GUI) as shown by Fig. (s) 5A-8, that receives inputs from a user by selectively navigating mapped data objects of the user interface (e. g., by using the selectable map information entities/objects of Fig. 5A) such that the system is subsequently configured to retrieve, display the source objects into target designing spaces in form of parent/child entity relationship set by the system during analyzing or editing (e.g., Fig. 7-8 and associated texts). Wherein, the rules specified in maps drive the two separate logical design spaces to perform either forward engineering or reverse engineering processing that results in the modification or transforming of the source data objects into target objects (e.g., Fig. 2 and associated texts). In addition, the maps also provide the rules to synchronize the objects of two separate designing/modeling spaces [e.g., see col. 11, lines 24-36],

such that the synchronization of two different design spaces is deemed to merge or store the objects of these design spaces into DB2 tables (e.g., col. 16, lines 8 –34). Moreover, the designing/modeling system clearly includes a Mainframe DB 2 Catalog module (e.g., the unit 46, Fig. 1B) that communicates with the utilities provided by the system over the Data Manipulation Language (DML) of a workstation manager (e.g., the unit 20, Fig. 1B) and the meta-data sub-systems (e.g., the units: 22, 24, Fig. 1B) via SQL files to either extract source objects for deriving into target objects of the logical design spaces by using a plurality of program interface modules [e.g., the SQL files, SPUF1 & Backman Catalog Extract units] or store the designed objects into the DB2 tables (e.g., via the maps of two engineering processing as specified in col. 10, lines 47-58, col. 12, lines 25-27, 35-37, 45-52, 65-68 & col. 16, lines 8-34).

Thereby, based on the discussion above, because applicant does not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections, therefore, it is believed that the rejections on record should be sustained.

11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

Respectfully submitted,

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Conferees

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